

photosensitive film 4, there is a space between the photosensitive surface of the photosensitive film 4 and the display surface of the LCD 3.

Apart from this, it is also possible to adopt an arrangement in which there is provided between the display surface of the LCD 3 and the photosensitive surface of the photosensitive film 4 a transparent glass plate or film of a predetermined thickness, thus substantially maintaining a predetermined distance between them and not holding them in direct contact with each other.

In the transfer apparatus of the present invention, the distance between the LCD 3 (i.e., its display surface) and the photosensitive film 4 (i.e., its photosensitive surface) is preferably 0.01 mm to 3 mm, more preferably 0.1 mm to 3 mm. As stated above, this arrangement is rather disadvantageous from the viewpoint of obtaining a clear transfer image. However, it is a condition necessary for realizing an apparatus actually easy to handle. The disadvantage due to this arrangement can be compensated for by the suppression of light diffusion, which can be achieved by making the sum total t of the thicknesses of the glass substrate 32 and the polarizing film 31 on the photosensitive film 4 side of the LCD 3 mentioned above not more than a predetermined dimension.

In the transfer apparatus of the present invention, it is desirable that the size of the image displayed on the LCD 3 be substantially the same as the size of the image transferred to the photosensitive film 4. This is due to the fact that, in the present invention, a direct transfer system is adopted in which no enlargement or reduction is effected using a lens system, thereby making it possible to achieve a reduction in the size and weight of the apparatus.

The main body case 6 is a case containing the above-mentioned components of the present invention, that is, the back light unit 1, the porous plate 2, the LCD 3, the film pack 5 (or the film case 51), a pair of rollers 61 for transferring a film which has undergone exposure and developing the processing liquid, etc. In the main body case 6, the pair of rollers 61 for transferring a film which has undergone exposure and developing the processing liquid are mounted at a position where they face the exposed-film extraction outlet 53 of the loaded film pack 5 (or the film case 51). Further, the main body case 6 has at a position facing this pair of rollers 61 the outlet 62 for extracting the exposed film 4 from the main body case 6. Further, the main body case 6 is provided with a back-up pressurizing pin 63 which is inserted from an opening on the back side of the exposed-film pack 5 and which presses

the film sheets 4 against the front edge of the film case 51, that is, the LCD 3 side.

Although not shown, it goes without saying that the transfer apparatus of the present invention includes a drive source (motor) for driving the pair of rollers 61, a power source for driving the motor and lighting up the bar-like light source 11 of the back light unit 1, electrical equipment for controlling these components, a data processing device for receiving digital image data from a digital image data supply portion to display an image on the LCD 3 and converting the data into image data for LCD display, a control unit, etc.

The transfer apparatus of the present invention is basically constructed as described above.

Examples

Specific examples of the transfer apparatus of the present invention will now be described.

(Example 1 and Comparative Example 1)

Using a film pack of "instax mini", mono-sheet type instant photography films (manufactured by Fuji Photo Film Co., Ltd.; image size in terms of diagonal length: 3 in.), as the photosensitive films, the following two cases were compared with each other in terms of the degree to which a scratch is generated: a case in which the LCD surface